

CLAIMS

1. Fibrous reinforcing material for bituminous mixes used for road pavements, characterized in that it is obtained mostly from glass filaments (2) having a diameter of greater than or equal to five micrometres and a length of greater than or equal to six millimetres.
2. Fibrous reinforcing material according to Claim 1, characterized in that it is in the form of flakes (1).
3. Fibrous reinforcing material according to Claim 1 or 2, characterized in that the said filaments (2) are made of E-type glass consisting essentially of calcium aluminium borosilicate with a low alkali content.
4. Fibrous reinforcing material according to one or more of the preceding claims, comprising a mixture of glass filaments (2) of different diameters.
5. Fibrous reinforcing material according to Claim 4, comprising glass filaments (2) of two different diameters in approximately equal quantities by weight.
6. Fibrous reinforcing material according to one or more of the preceding claims, in which the said glass filaments (2) come from chopped glass yarns (3).
7. Fibrous reinforcing material according to one or more of the preceding claims, in which the said glass filaments (2) have a minimum diameter of greater than or equal to five micrometres and a maximum diameter of less than or equal to twenty-four micrometres.
8. Fibrous reinforcing material according to Claim 7, in which the said filaments (2) have a mean diameter of between ten and fifteen micrometres.
9. Fibrous reinforcing material according to one or more of the preceding claims, in which the said filaments (2) have mainly a so-called minimum length of

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greater than or equal to six millimetres and a maximum length of less than or equal to twenty millimetres.

10. Fibrous reinforcing material according to Claim 9, in which the said filaments (2) have a mean  
5 length of between ten and twelve millimetres.

11. Process for manufacturing a fibrous reinforcing material for bituminous mixes used for road pavements, characterized in that it comprises: a selection step (4) in which glass yarns (3) consisting of filaments  
10 (2) having a diameter greater than or equal to a minimum diameter of five micrometres and less than or equal to a maximum diameter of twenty-four micrometres are chosen; and a milling step (6) during which the said yarns are chopped into filaments (2) having mostly  
15 a length of greater than or equal to six millimetres.

12. Process according to Claim 11, in which, in the said selection step (4), the said glass yarns (3) are chosen from production scrap or waste.

13. Process according to Claim 11 or 12, in which,  
20 in the said selection step, yarns (3) made of E-grade glass are chosen.

14. Process according to one or more of Claims 11 to 13, in which, in the said selection step, "textile" glass yarns (3a) and "roving" glass yarns (3b) are  
25 chosen.

15. Process according to Claim 14, in which the said yarns (3a, 3b) are metered in approximately equal quantities by weight.

16. Process according to one or more of Claims 11 to 15, in which yarns (3) of different diameters,  
30 chosen so as to obtain a mean diameter of between ten and fifteen micrometres, are selected.

17. Process according to one or more of Claims 11 to 16, in which, during the milling step (6), the said  
35 yarns (3) are chopped into filaments (2) having a mean length of between ten and twelve millimetres.

18. Process according to one or more of Claims 11 to 17, in which, in the milling step (6), the chopped filaments (2) agglomerate in the form of flakes (1).

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19. Process according to one or more of Claims 11 to 18, in which the milling step (6) is carried out using a chopper (6a) with rotating blades.
20. Use of a fibrous material according to one or more of Claims 1 to 10 or produced according to one or more of Claims 11 to 19, characterized in that the said fibrous material (1) is incorporated as reinforcing material into bituminous mixes for road pavements.
21. Bituminous mix for road pavements, of the type comprising bitumen and a mixture of inert materials, characterized in that it contains a fibrous reinforcing material (1) according to one or more of Claims 1 to 10 or produced according to one or more of Claims 11 to 19.